## Requested Management Guidance for the Delta Cross Channel Through-Delta Facility (DCCTDF) Project Team

The Project Team (DCCTDF) in order to evaluate improved Delta Cross Channel (DCC) operations and a screened Through Delta Facility (TDF) on the Sacramento River requires clarification on three issues. These issues all have significant implications in both technical evaluations and policy implications.

1. Should the team assume that the total average daily diversion through both the DCC and TDF would not exceed present physical capacity of the DCC (approximately 4000 cfs daily average varying approximately from 0 to 8000 cfs on an hourly basis)?

Consideration: Although the Management Team has address this issue before and suggested that the daily average flow through the combined facilities should not be assumed to be no more than the daily average through the DCC, the team raises it here because the next two questions rest upon it.

2. Should the team evaluate both tidally pumped and actively pumped diversions with a 4,000 cfs average per day for the TDF?

Consideration: Given today's power costs, a tidally pumped diversion would be cheaper to operate. However, because the rate of diversion varies widely over the course of a day, it requires a larger, more expensive facility to accommodate the daily peaks of approximately 8000 cfs (roughly 4 times the size of the new GCID screens) to achieve an average daily diversion rate of 4000 cfs. The public perception of such a diversion may be different than anticipated when the initial 4000 cfs target was chosen. The length of the diversion is also likely to prove problematic with NMFS criteria regarding exposure times. One proposed solution to these problems is to have a number of smaller intakes on the river from Hood to the DCC. In contrast, an actively pumped diversion may be less expensive to build but considering power costs, much more expensive to operate. However, because water could be diverted on a more nearly continuous basis, the facility would be designed with a maximum diversion rate closer to 4000 cfs.

3. Should the rules/decisions which currently (year 2000) define when the DCC gates are closed and also define when the TDF would be used?

Consideration: If the total diversion of the TDF and DCC is limited to no more than the amount passed through the DCC, then the TDF would not be used and thus provide no water quality improvement from June 20 to November 1 because the DCC would normally be open. This period is also when exports are restricted the least (no X2 requirements; E/I ratio of 65%), so a large amount of export pumping is likely to occur in these 4 months. If the TDF were used, lower salinity water could be exported for delivery or stored in San Luis Reservoir.

From February 1 to May 20 the DCC gates are closed to protect outmigrating salmon. This is the wettest season of the year, exports are limited to 35% and high outflows associated with X2 requirements combine to make seawater intrusion a small risk even with the DCC closed and no TDF flow. If the TDF were used in this season it would represent a new large diversion along the migratory path of these fish, with an unavoidable increases in losses of salmon and other species.

From November through January the DCC can be closed for fish protection half of the time. If in these months the TDF is used only when the DCC gates are closed, then the biological impacts of the TDF will be restricted to those species that are at risk in those months. If the TDF is expected to be used outside of this period, it would probably have to imply either further restrictions on the DCC gates in summer months or relaxation of the E/I and or X2 requirements in the spring months. Under those conditions the project team would need substantial further guidance.